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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,350

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Michael L. Fripp

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EXAMINER

WAKS, JOSEPH

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,350

Applicant(s)

FRIPP ET AL.

Examiner

Joseph Waks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 32-59, 65-68, 70, 71 and 74-87 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15, 37-59, 65-68 and 84-86 is/are allowed.
- 6) ☒ Claim(s) 32, 33, 36, 70, 71, 74-83, 87 is/are rejected.
- 7) ☒ Claim(s) 34 and 35 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892) •
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of the generator including an electromagnetically active material, wherein strain being produced in the electromagnetically active material in response to displacement of the vibrating assembly, and the generator further including a magnet and coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the vibrating assembly as recited in claims 74 and 79, or a housing which is displaced in response to displacement of the vibrating assembly, wherein the housing contains a magnet and a coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the housing as recited in claim 80, or first and second magnets, and a coil, wherein relative displacement between the first magnet and the coil is produced in response to displacement of the vibrating assembly, and wherein magnetic fields produced by the first and second magnets bias against relative displacement between the first and second magnets as recited in claim 81, or a magnet and coil, and wherein relative rotation between the magnet and coil is produced in response to displacement of the vibrating assembly as recited in claim 82, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 74-82 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The features of the generator including an electromagnetically active material, wherein strain being produced in the electromagnetically active material in

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response to displacement of the vibrating assembly, and the generator further including a magnet and a coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the vibrating assembly as recited in claims 74 and 79, or a housing which is displaced in response to displacement of the vibrating assembly, wherein the housing contains a magnet and a coil, and wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the housing as recited in claim 80, or first and second magnets, and a coil, wherein relative displacement between the first magnet and the coil is produced in response to displacement of the vibrating assembly, and wherein magnetic fields produced by the first and second magnets bias against relative displacement between the first and second magnets as recited in claim 81, or a magnet and coil, and wherein relative rotation between the magnet and coil is produced in response to displacement of the vibrating assembly as recited in claim 82, are not supported neither by the specification nor the drawings and seems to contradict one each other.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 32, 33, 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Tubel et al. (US 5,839,508).

Tubel et al. disclose in Figure 3 invention as claimed: a vibrating assembly 72 which displaces in response to fluid flow across the vibrating assembly, and a generator 78 which generates electrical power in response to displacement of the vibrating assembly, wherein the vibrating assembly includes a lift reversal device which produces alternating lift coefficients in the vibrating assembly in response to the fluid flow across the vibrating assembly, magnet and coil, and wherein relative displacement between the magnet 72 and coil 78 produces electricity in the coil in response to displacement of the vibrating assembly.

6. Claims 70, 71, 83 and 87 are rejected under 35 U.S.C. 102(b) as being anticipated by Schultz et al. (US 6,504,258).

Schultz et al. disclose in Figures 2E and 14 invention as claimed: a vibrating assembly 42 or 116 that displaces in response to fluid flow across the vibrating assembly, and a generator 134, 136 that generates electrical power in response to displacement of the vibrating assembly, wherein the generator includes an electromagnetically active, magnetostrictive material 72 or 134, strain being produced in the electromagnetically active material in response to displacement of the vibrating assembly, and wherein electricity is produced in a coil 74 or 136 of the generator in response to strain being produced in the electromagnetically active material.

Allowable Subject Matter

7. Claims 1-15, 37-59, 65-68, and 84-86 are allowed.

8. Claims 34 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed January 30, 2006 have been fully considered but they are not persuasive.

Examiner respectfully traverses applicants' argument regarding the basis for drawings objection and 35 U.S.C. 112, first paragraph rejection. Examiner directs applicant attention to 35 U.S.C. 113 that clearly states: "The applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented." In claims 74 and 79 applicant recites two structurally and functionally distinctive systems used together. The electromagnetically active material (elements 94, 168 and 266 as indicated by applicant) is included in structures shown in Figures 8, 13 and 24.

However, these drawings don't teach the structure including both, the electromagnetically active material and the magnet and coil wherein relative displacement between the magnet and coil produces electricity in the coil in response to displacement of the vibrating assembly. Since in the first structure the current or the magnetic field changes are resulted by applying stress to a piezoelectric or magnetostrictive material and in the second case by displacement of magnetic material in the coil, the interrelation between the structures can't be understood from the provided drawings.

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Applicant also argues that the specification provides for any combination of the disclosed generating systems. Examiner submits, that he was not able to find a description of any of such combinations in the in the specification.

In order for such combination to be considered, applicant is requested to indicate where in the specification any of these combinations is described and to provide appropriate drawings to support the claimed features. Since these limitations are not supported by the appropriate drawings and are not disclosed in the specification examiner will maintain the rejection of claims 74-82 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Regarding allowability of claims 32-36, examiner directs applicant's attention that the basis of claims rejection was set in the Office action of January 30, 2006. In Office action of March 10, 2006 applicant's arguments regarding claims 32, 33, 36, 60, and 62-64 were traversed. Although the specific rejection details of claims 32, 33 and 36 was not copied from the previous Office action, the claims remained rejected. Since the arguments regarding claims 60-64 were fully applicable to claims 32, 33 and 36 and in response applicant cancelled claims 60-64. The claims 32, 33, and 36 remain rejected. For clarity examiner repeated the rejection of claims 32, 33, and 36 in this Office action.

10. Applicant's arguments with respect to claims 70, 71, 83 and 87 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (571) 272-

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2037. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph Waks
Primary Examiner
Art Unit 2834

7/13/06